# MINUTES OF THE NUTRITION COORDINATING COMMITTEE (NCC) MEETING, NATIONAL INSTITUTES OF HEALTH (NIH)

Rockledge 2, Conference Room 9100-9104, Bethesda, MD September 5, 2013 2:00 – 4:00 PM

#### WELCOME

Dr. Van Hubbard, Director of the NIH Division of Nutrition Research Coordination (DNRC), convened the meeting at 2:00 PM and welcomed participants. Phone participants included the following: Dr. Tanya Agurs-Collins, NIH NCI; Dr. Rachel Ballard-Barbash, NIH NCI; CAPT Shirley Blakely, FDA; Dr. Josephine Boyington, NIH NHLBI; Dr. Kellie Casavale, ODPHP; Dr. Milton Corn, NIH NLM; Ms. Mary Cutting, NIH NIDCR; Ms. Janet de Jesus, NIH NHLBI; Dr. Linda Duffy, NIH NCCAM; Ms. Rachel Fisher, NIH DNRC; Dr. Sheila Fleischhacker, NIH DNRC; Dr. Roberto Flores, NIH NCI; Ms. Joanne Karimbakas, NIH NIDDK; Dr. Melinda Kelley, NIH NHLBI; Ms. Michele Lawler, HRSA; Ms. Jessica Levings, CDC; Dr. Padma Maruvada, NIH NIDDK; Dr. Joan McGowan, NIAMS; Dr. Samara Joy Nielsen, CDC NCHS; Dr. Rick Olson, ODPHP; Dr. Mary Poos, FDA; Dr. Dan Raiten, NIH NICHD; Ms. Colette Rihane, USDA CNPP; Dr. Maria Said, NIH FIC; Dr. Jennifer Seymour, CDC; RADM Penelope Slade-Sawyer, HHS; Dr. Denise Stredrick, NIH ODP; Dr. Derrick Tabor, NIH NIMHD; Ms. Ana Terry, CDC NCHS; Dr. Robert Tilghman, NIH NIDDK; and Dr. Susan Volman, NIH NIDA. The agenda for the meeting is provided as Appendix A and the list of attendees is provided as Appendix B.

#### APPROVAL OF MINUTES FROM THE AUGUST 1, 2013 NCC MEETING

Minutes from the August 1, 2013 NCC meeting had previously been sent to NCC members via email. Dr. Hubbard asked if there were any other corrections to the minutes. There were none. Dr. Peter Greenwald, NIH National Cancer Institute (NCI), made a motion to approve the minutes, and Dr. Paul Cotton, NIH National Institute of Nursing Research (NINR), seconded the motion. The minutes were thus approved and will be posted on the DNRC website, <a href="http://www.dnrc.nih.gov">http://www.dnrc.nih.gov</a>, along with the minutes from the previous NCC meetings.

## THE SCIENCE OF INTERMITTENT FASTING AND ITS IMPLICATIONS FOR HEALTH CARE

Mark Mattson, Ph.D., Senior Investigator and Chief of the Laboratory of Neurosciences at the National Institute on Aging, is considered a leader in the area of cellular and molecular mechanisms underlying neuronal plasticity and neurodegenerative disorders. He has made major contributions to understanding of the pathogenesis of Alzheimer's

disease, and to its prevention and treatment. Dr. Mattson presented an overview of the research his lab has conducted using intermittent fasting (IF) in animals and humans and its potential role in protecting against neurodegenerative disorders and cardiovascular disease.

As Dr. Mattson pointed out via an example from Upton Sinclair's *The Fasting Cure*, published in 1911, fasting has long been an interest in the medical community. Fasting can be defined in many ways, but the three most common IF diets are: 1) *the 5:2 diet* in which one eats normally 5 days each week and eats no more than 600 calories 2 days each week; 2) *alternate day fasting* in which the person alternates between normal eating and 600 calorie days; and 3) *time-restricted eating* in which food is consumed only during a 4-8 hour time period every day. Currently, there are numerous diet books on the market that are based on Dr. Mattson's research and these various fasting regimens.

In studies aimed at identifying preventative and therapeutic strategies for neurodegenerative disorders, Dr. Mattson's lab has shown that rats and mice maintained on an IF regimen exhibit increased resistance to degeneration of hippocampal neurons in models of Alzheimer's disease, increased resistance of substantia nigra dopaminergic neurons in models of Parkinson's disease, and increased resistance of cortical and striatal neurons in stroke models. IF appears to increase neurogenesis in the hippocampus which may possibly contribute to enhanced cognitive function and resistance to injury. Further studies exploring the cellular and molecular mechanisms that mediate the beneficial effects of IF on brain plasticity and resistance to injury are underway.

In addition to animal studies, Dr. Mattson's lab has conducted several studies in humans and has shown that IF reduces markers of oxidative stress and inflammation in overweight adults. More research is needed in humans, and a trial specifically looking at the 5:2 diet will start soon.

Through mild cellular stress, IF appears to promote several adaptive responses that improve neuroprotection, neurogenesis, synaptic plasticity, and neural network function. Overeating and sedentary lifestyles suppress this adaptive cellular stress response, and therefore can increase the risk for Alzheimer's and Parkinson' diseases, stroke and even depression. Dr. Mattson emphasized that in order to change eating patterns and encourage individuals to adopt a more brain-healthy lifestyle, concerted efforts of governments, families, schools, and physicians are needed.

## A PUBLIC PRIVATE PARTNERSHIP TO ENHANCE THE USDA NATIONAL NUTRIENT DATABASE

Alison Kretser, MS, RD, Director, Science Programs, International Life Science Institute (ILSI) North America spoke to the NCC about a Public-Private Partnership (PPP) effort to foster public health by delivering comprehensive food industry data to augment the USDA National Nutrient Database. The impetus for this PPP stemmed from a Presidential memo issued in August 2011 directing Federal agencies to develop PPPs in areas of importance to agencies' missions.

In response to the Presidential memo, USDA Agricultural Research Service (ARS) formed the Agricultural Technology Innovation Partnership (ATIP) Foundation with the intent to partner with economic development entities who specialize in providing complementary business assets and business expertise to ARS and its private sector partners. Through the ATIP Foundation, USDA ARS has issued two requests for development of public-private partnerships, one being the initiative to augment the USDA National Nutrient Database with food composition data on branded food products. The resulting Branded Food Products Database for Public Health PPP was formed with the USDA Agricultural Research Service (ARS), the ATIP Foundation, and ILSI North America. The ATIP website includes project links and FAQs about the PPP. Link: <a href="http://atipfoundation.com/branded-food-products">http://atipfoundation.com/branded-food-products</a>

The organizational structure of the Partnership includes a 15-member Steering Committee and several subgroups that were formed to guide the partnership effort. An Operations and Management Group was established for the primary purpose of proposing infrastructure, governance, and the day-to-day management and operations of the PPP, all of which are subject to final approval by the Steering Committee. A Criteria Group comprised of individuals from government agencies, the academic research community, health care providers, manufacturers and retailers who have expertise in nutrient databases are defining the criteria for data submission and inclusion in enhanced database. A list of eight short term criteria was presented at the first meeting on May 22, 2013. The Statement of Work was developed and will be shared during the listening sessions. The first Data Quality Subcommittee meeting will be held on September 25, 2013. A Communications Group was established by the Steering Committee to lead development of communications materials and recruitment of partnership participants.

The PPP is designed to grow inclusion of participants as widely as possible in a phased approach. Ms. Kretser mentioned that the University of Minnesota, Nutrition

Coordinating Center participated in a recent call and will participate on the Criteria Group and the Data Quality Subcommittee.

On July 23<sup>rd</sup> the National Academies' Government-University-Industry Research Roundtable (GUIRR) hosted a webinar to introduce the Branded Food Products Database for Public Health PPP. Links for the webinar recording and PowerPoint slides can be found on the GUIRR site (scroll down):

http://sites.nationalacademies.org/PGA/guirr/PGA\_080979#atip

#### Upcoming events:

- A pilot "listening session" (in-person invitation only and webinar option) in Cleveland, Ohio on October 10<sup>th</sup> to discuss ways to enhance the USDA National Nutrient Databank. A second "listening session" is scheduled for the National Academy of Sciences Building in Washington, DC on November 14<sup>th</sup>.
- IT infrastructure considerations are vital to the success of the initiative. A
  meeting is planned for October to discuss specific issues related to IT
  infrastructure; IBM, GS<sub>1</sub>, FDA Structural Product Labeling Database staff, and
  NIH NCI, are expected to participate.

#### OFFICE OF DISEASE PREVENTION AND HEALTH PROMOTION (ODPHP) UPDATE

Dr. Kellie Casavale and Ms. Holly McPeak provided the following information:

#### Dietary Guidelines for Americans

The second meeting of the Dietary Guidelines Advisory Committee (DGAC) will be held October 3-4, 2013. NCC participants, especially those on the NIH campus, are encouraged to attend or join by Webcast.

**REGISTER HERE** for In-Person or Webcast for one or both days. Deadline is **September 25, 2013.** 

Location: National Institutes of Health (NIH) 9000 Rockville Pike, Bethesda, MD 20892

**Day 1:** Thursday, October 3, 2013, 8:30 a.m.–11:30 a.m. Masur Auditorium, NIH Clinical Center, Building 10. *Check-in opens at 7:30 am.* 

**Day 2:** Friday, October 4, 2013, 8:30 a.m.–3:45 p.m. FAES Academic Center, classrooms 2, 6-7, NIH Clinical Center, Building 10. (Please note that on-site seating is limited on October 4.) *Check-in opens at 7:30 am.* 

**Webcast Information:** Registration is required. To access the meeting on October 3 and 4, go to www.videocast.nih.gov. You will need to enter the e-mail address that you used and meeting password that you received when you registered.

Please be sure to test your browser prior to the event. A test page can be found at <a href="http://videocast.nih.gov/browsertest/">http://videocast.nih.gov/browsertest/</a>. If you have tested the video player by watching a past event but can't view a live VideoCast, call the NIH IT Service Desk at (301) 496-4357, toll free (866) 319-4357 or submit a request at <a href="http://itservicedesk.nih.gov/">http://itservicedesk.nih.gov/</a>

**Meeting Materials:** The draft <u>agenda</u> (subject to change) and preliminary meeting materials will be made available at <u>www.DietaryGuidelines.gov</u> at least a day prior to the meeting. All meeting materials, webcast recordings, a meeting summary, and a transcript will be available at this link after the meeting, when available.

**Additional Assistance**: National Capitol Contracting, LLC is providing registration and logistics assistance in support of the DGAC meetings. If you need additional assistance or require a sign language interpreter or other special accommodations, please contact Laura Walters at <a href="mailto:govmeetings@nccsite.com">govmeetings@nccsite.com</a> or (703) 243-9696 by 5 p.m. E.D.T., September 25, 2013.

Future meetings: View the 2015 Dietary Guidelines Timeline [PDF - 147KB]

For more information go to: www.DietaryGuidelines.gov

#### Physical Activity Guidelines for Americans:

Amber Mosher and Katrina Piercy from ODPHP contributed to a commentary article on the PAG Midcourse Report for the <u>September/October 2013 issue</u> of Public Health Reports. The piece ran as (past) U.S. Surgeon General Regina Benjamin's last <u>Surgeon General's Perspective</u> titled, "The Importance of 60 Minutes or More of Daily Physical Activity".

#### Spanish translations:

Spanish Youth Factsheet and PAG Midcourse Report Infographic are being prepared for the Web. Also, the *Eat Healthy, Be Active Community Workshops* will also be translated into Spanish soon. This information will be shared via E-blast with local communities.

#### <u>Dietary Reference Intakes (DRIs):</u>

A total of <u>16 nutrients</u> were nominated during the April 29-July 31, 2013 nomination time period. More information is available at <u>www.health.gov</u> (click on DRI Tab).

### OFFICE OF DIETARY SUPPLEMENTS (ODS) UPDATE

Dr. Barbara Sorkin, ODS, provided the following updates:

#### ODS Monthly Seminar Series

The first seminar of the 2013/14 series will take place on October 2, 2013. See details below:

#### Robert Chapkin, Ph.D.

Professor of Nutrition, Biochemistry and Biophysics Department of Nutrition and Food Science Texas A&M University

**Topic:** "Barriers to Dietary Chemoprevention: the N-3 PUFA Story"

**Location:** 6100 Executive Blvd, 1<sup>st</sup> floor conference room

#### **ODS Fact Sheets**

ODS recently posted an updated version of the magnesium fact sheet for health professionals on their website. They are currently working on a consumer version, which will be available shortly.

## NIH Workshop on the Use and Biology of Energy Drinks

A number of NIH ICs and Offices co-sponsored this workshop on August 15 and 16. Details can be found at: <a href="https://events-support.com/events/Energy\_Workshop">https://events-support.com/events/Energy\_Workshop</a>. ODS is in the process of obtaining 508 compliant versions of the PowerPoint slide presentations and will post them on the website when available.

#### REPORTS FROM NCC MEMBERS AND LIAISONS

Ms. Kathryn McMurry, NHBLI, informed the NCC that NHLBI has decided to take
a different direction with the cardiovascular guidelines that were discussed at a
prior NCC meeting. NHBLI will publish the systematic evidence report, but the
current plan is for the clinical practice guidelines to be developed in partnership

with the American College of Cardiology and the American Heart Association. The partner organizations will be responsible for publishing the guidelines.

- Dr. Young Kim, NCI, announced that NCI has decided to fund an R21 grant application that proposes to evaluate the feasibility of a grape seed extract for lung cancer prevention. The central hypothesis of this proposal is that oral administration of grape seed extract is safe and favorably modulates mechanisms associated with lung tumorigenesis. The study will start this Fall and will be completed in 2015.
- Dr. Deirdra Chester, the National Program Leader for Applied Nutrition Research at the National Institute of Food and Agriculture (NIFA), introduced herself and informed the NCC that she will be presenting at a future meeting to share information about potential opportunities for collaboration. In the meantime, you can contact Dr. Chester to discuss any current or upcoming opportunities: <a href="mailto:dnchester@nifa.usda.gov">dnchester@nifa.usda.gov</a>.
- Dr. Sharon Ross, NCI, announced Dr. Chi Van Dang from the Abramson Cancer Center at U Penn has accepted the invitation to be the next Stars in Nutrition speaker at 2 PM on Oct 16 at the Lipsett Auditorium.

#### CURRENT DNRC UPDATE OF ACTIVITIES

#### Nutrition Education Subcommittee (NES):

The NES reviews nutrition education materials for consistency with the *Dietary Guidelines for Americans (DGAs), 2010.* 

NES Chair, Dr. Margaret McDowell, NIH/DNRC reported that the NES completed two dietary guidance reviews since the August NCC meeting.

#### Completed NES Reviews:

1. NIH, Office of Dietary Supplements (ODS) Selenium QuickFacts sheet- The ODS QuickFacts information sheets are written for the educated, health-conscious layperson without a background in nutrition or medicine. The sheets are limited in length to approximately five pages and they take a "just the facts" approach in providing information and advice. The selenium QuickFacts sheet will be posted online: http://ods.od.nih.gov/factsheets/list-all/

2. NIH National Center on Complementary and Alternative Medicine (NCCAM)-An NCCAM Time to Talk Tips series information sheet entitled 7 Things to Know About Omega-3 Fatty Acids was reviewed by the NES. An expedited review was completed by HHS/USDA dietary guidance reviewers. The material appears in the August issue of the NCCAM Clinical Digest e-newsletter. Link: http://nccam.nih.gov/node/5781

#### **NEXT NCC MEETING**

The next regularly scheduled NCC meeting will be on November 7, 2013.

#### **ADJOURNMENT**

The meeting was adjourned at 4:00 PM

#### LIST OF APPENDICES

Appendix A: NIH NCC Meeting Agenda for September 5, 2013
Appendix B: NIH NCC Meeting Attendees for September 5, 2013

### APPENDIX A: NIH NUTRITION COORDINATING COMMITTEE MEETING AGENDA

Thursday, September 5, 2013 2:00 – 4:00 pm Rockledge 2, CR#9100-9104

1.	WelcomeVan Hubbard, DNRC
2.	Approval of Minutes of August 1, 2013 MeetingVan Hubbard, DNRC
3.	The Science of Intermittent Fasting and its Implications for Health CareMark Mattson, NIA
4.	A Public Private Partnership to Enhance the USDA National Nutrient DatabaseAlison Kretser, ILSI North America
5.	ODPHP and Dietary Guidelines Advisory Committee UpdatesHolly McPeak & Kellie Casavale, ODPHP
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6.	ODS UpdatesBarbara Sorkin, ODS
	ODS Updates
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<sup>9.</sup> Next Meeting – November 7, 2013

<sup>\*</sup> Updates will be included in the minutes of the meeting only

## APPENDIX B: NCC MEETING ATTENDEES FOR SEPTEMBER 5, 2013

Agencies, Institutes, Centers, and	Members Present	Members Absent	Alternates Present	Other Individuals Present
Divisions				
DNRC Director (Chair)	V Hubbard			
DNRC Deputy-Director	P Starke-Reed			
NIH MEMBERS				
NCI	S Ross			T Agurs-Collins; R Ballard-Barbash; R Flores; P Greenwald; Y Kim
NHLBI	K McMurry			J Boyington; J de Jesus; M Kelley
NIDCR	M Cutting			
NIDDK	R Kuczmarski			J Karimbakas; P Maruvada; R Tilghman
NINDS				
NIAID		P Sato		
NIGMS		S Somers		
NICHD		G Grave	D Raiten	
NEI		S Gordon		
NIEHS		K Gray		
NIA		J Hannah		
NIAMS	X Wang		J McGowan	
NIDCD		B Wong		
NIMH		M Chavez		
NIMHD	D Tabor			
NIDA	S Volman			
NIAAA		R Breslow		P Gao
NINR	P Cotton			
NCCAM	L Duffy			
FIC	2 Dany	M Levintova		M Said
NHGRI		D Scholes		
NIH LIAISONS				
CC		A Courville		
CSR	R Garofalo	_		
NLM	M Corn			
OBSSR		D Sampson		
ODS		P Coates		B Sorkin
OD/ODP		B Portnoy		
PRCC	D Stredrick			
AGENCY LIAISONS				
AHRQ		I Mabry-Hernandez		
CDC/NCCDPHP	J Seymour			J Levings

Agencies, Institutes,	Members Present	Members Absent	Alternates Present	Other Individuals
Centers, and				Present
Divisions				
CDC/NCHS	N Ahluwalia			S Nielsen; A Terry
FDA	M Poos		S Blakely	
HRSA	M Lawler			
IHS		T Brown		
ODPHP	H McPeak			K Casavale; R Olson
USDA/ARS		D Klurfeld		J Finley
USDA/NIFA	D Chester			
USDA/CNPP				C Rihane
DOD				·

**DNRC**: R Fisher; S Fleischhacker; S Frazier; J Krebs-Smith; C McDade-Ngutter; M McDowell; K Regan

GUESTS: A Kretser, ILSI North America; S Ohlhorst, ASN; P Slade-Sawyer, HHS